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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/700,093	11/10/2000	Lucian Hirsch	P00-1767	1415

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EXAMINER

ZHEN, LI B

ART UNIT	PAPER NUMBER
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2194

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/700,093

Applicant(s)

HIRSCH ET AL.

Examiner

Li B. Zhen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 29 are pending in the current application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 – 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
4. Currently amended claims 1 and 17 recite the new limitations “transmitting state information of an agent” [claim 1, lines 3, emphasis added], “checking, by said agent, said state information of said agent” [claim 1, line 8; claim 17, line 5, emphasis added] and “sending...only selected state information of said agent” [claim 1, line 10-11; claim 17, line 6-7, emphasis added]. There does not appear to be a written description of the communicating state information of an agent (i.e. information describing the state of the agent) to a manager in the application as filed. Throughout the specification, applicant discloses that the state information is state attributes for characterizing the operational readiness, the manageability and the use of a resource [i.e., see p. 2, lines 20-24; p. 4, lines 7-15; p. 10, lines 10-17; p. 10, line 34 - p. 11, line 5; p. 13, lines 18-32; p. 14, line

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23 – p. 15, line 10; p. 17, line 28-29]. For example, the specification discloses the status attributes UNS, ALS and AVS define the state of the resource associated with the object with regard to operational readiness, current use and manageability [p. 14, lines 23-27]. As best understood by the examiner, the specification discloses state information for describing resources and not information describing the state of an agent. Therefore, the applicant fails to disclose “transmitting state information of an agent”, “checking, by said agent, said state information of said agent” and “sending... only selected state information of said agent” in the specification as filed.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 5,987,514 to Rangarajan [cited in the previous office action].**

7. As to claim 1, Rangarajan teaches a method of processing state information in a communication system by way of a management network [col. 2, lines 18 – 32] having a number of management levels [col. 3, lines 40 – 57], comprising:

transmitting state information [event report] between an agent [mid-level agent] of one management level [mid-level manager: a mid-level agent that receives event request from the network manager; col. 3, lines 20 – 57] and a manager [network manager 48] of a next-higher management level [mid-level manager 40-45 generates an event report 78 and sends the event report 78 to the network manager 48; col. 6, lines 30 - 67] for a state realignment [ascertain the status of the devices associated with the mid-level managers 40-45; col. 5, lines 39 – 57] upon request of the manager [network manager 48 generates regularly scheduled event requests 82; col. 5, lines 39 – 57],

sending, by the manager [network manager 48], a request message [event request can contain the following fields: the name of the event request, a destination address, interval, count, and a list of attributes records having the threshold conditions; col. 8, lines 10 - 25] for performing the state realignment to the agent [network manager 48 generates regularly scheduled event requests 82 to mid-level managers 40-45 in order to ascertain the status of the devices associated with the mid-level managers 40-45; col. 5, lines 39 – 57];

checking, by the agent, the state information with regard to deviations from a normal state [mid-level managers 40-45 gather information from the various devices, compare the information to certain conditions, and generate events when the conditions are satisfied; col. 6, lines 30 – 57]; and

sending, by the agent to the manager in one or more successive messages [mid-level manager 40-45 generates an event report 78 and sends the event report 78 to the

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network manager 48; col. 6, lines 43 – 57] in response to the request message, only selected state information indicating the deviations from the normal state [attribute values are compared with the conditions specified in the event request. When a value satisfies a condition, the mid-level manager forwards the network manager an event report signifying the occurrence of the event; col. 3, lines 42 – 52].

8. As to claim 17, this is a system claim that corresponds to method claim 1; note the rejection to claim 1 above, which also meets this system claim.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2 – 16 and 18 – 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rangarajan in view of U.S. Patent No. 6,404,743 to Meandzija [cited in the previous office action].

11. As to claim 2, Rangarajan teaches utilizing state attributes selected from the group consisting of an operational state and a usage state [col. 9, lines 48 – 54]. Rangarajan does not specifically teach an administrative state.

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12. However, Meandzija teaches utilizing state attributes selected from the group consisting of an operational state [operational state], an administrative state [an event forwarding discrimination group, which includes an administrative state, an operational state; column 11, lines 38 – 45] and a usage state [usage state 420; column 12, lines 29 – 36] as state information.

13. It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the teaching of utilizing administrative state as state information as taught by Meandzija to the invention of Rangarajan because administrative state can be set by a manager and used to administratively prohibit an agent from use and in conjunction with a community string, the administrative state can be used for concurrency control [col. 12, lines 8 – 12 of Meandzija].

14. As to claim 3, Rangarajan as modified teaches the normal state is defined by values for the state attributes [state values and state transitions are as defined in the ITU-T X.731 standard; column 11, line 65 – column 13, line 33 of Meandzija] selected from the group consisting of an operational state, an administrative state, a usage state, an unknown state, an alarm status [value defined for the alarm status in the X.731 standard is a set of enumerated values; column 12, lines 54 – 65 of Meandzija], and an available status [value defined for the availability status in the X.731 standard is a set of enumerated values; column 12, line 65 – column 13, line 9 of Meandzija].

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15. As to claim 4, Rangarajan as modified teaches utilizing state attributes for characterizing an operational readiness [operational state 415 describes the operational state of the unit represented by the agent/subagent; column 12, lines 13 – 28 of Meandzija], manageability [administrative state 410 describes the administrative state of the unit represented by the agent/subagent; column 11, line 65 – column 12, line 2 of Meandzija] and use of a resource [availability status 435 describes-the availability status of the unit represented by the agent/subagent; column 12, line 65 – column 13, line 9 of Meandzija] supported by the agent in the communication system as state information.

16. As to claim 5, Rangarajan as modified teaches utilizing status attributes, which specify for a resource supported by the agent in the communication system whether it is in an unknown state [unknown status describes the unknown status of the unit represented by the agent/subagent; column 13, lines 27 – 34 of Meandzija], in an alarmed state [alarm status 430 describes the alarm status of the unit represented by the agent/subagent; column 12, lines 54 – 65 of Meandzija] or in a state of availability [availability status 435 describes-the availability status of the unit represented by the agent/subagent; column 12, line 65 – column 13, line 9 of Meandzija], as state information.

17. As to claim 6, Rangarajan as modified teaches sending by the manager in the request message a correlation information item for a correlation of the respective request with messages containing changed state information received by the agent

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[Event Forwarding Discriminator (EFD) Group 530 comprises EFD configuration information defining what types of events an EFD will transform into notifications, at what times of day it will do so, and to which managers it will send the notifications to; column 13, lines 48 – 55 of Meandzija].

18. As to claim 7, Rangarajan as modified teaches sending by the agent in a message for starting the state realignment, a correlation information item for correlating the messages containing changed state information subsequently sent with the state realignment started in each case [once the agent generates an event as specified in the Event table 515, it checks an EFD Table 535 to find an EFD that matches that event and specifies what kind of notification is to be generated, and to which manager that notification is to be sent; column 14, lines 8 – 15 of Meandzija].

19. As to claim 8, Rangarajan as modified teaches sending the correlation information generated by the agent in the message or messages containing the changed state information [generating the event at the agent and communicating a notification regarding the event from the agent to the management station via the network; column 4, lines 55 – 65 of Meandzija].

20. As to claim 9, Rangarajan as modified teaches sending by the manager a parameter to the agent and controlling the state realignment in dependence on the parameter [event information also defines EFD information that defines pre-conditions

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for communicating a notification of an event from the agent 230 to the management station 210 via the network 160; column 10, lines 57 – 67 of Meandzija].

21. As to claim 10, Rangarajan as modified teaches sending by the manager a parameter and automatically initiating the state realignment [automatic schedule] by the agent utilizing the parameter [the agent may have an automatic schedule which defines time periods in which a notification may be provided for certain events; column 6, lines 13 – 21 of Meandzija].

22. As to claims 11 and 12, Rangarajan as modified teaches providing a parameter by the manager with a parameter value which specifies a starting time [start time] and end time [stop time] for the automatic state realignment [scheduling function 540 includes specifications of a daily start and stop time and a weekly mask specifying when the EFD changes availability status from off-duty to available; column 14, lines 16 – 33 of Meandzija].

23. As to claim 13, Rangarajan as modified teaches providing by the manager a parameter with a parameter value which specifies a time interval [time periods] for a repetition of the automatic state realignment [the agent may have an automatic schedule which defines time periods in which a notification may be provided for certain events; column 6, lines 13 – 21 of Meandzija].

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24. As to claim 14, Rangarajan as modified teaches providing by the manager a parameter with a parameter value which characterizes resources for which changed state information [specifies what type of notification] must be transmitted by the agent [Each EFD specifies what type of notification is to be sent for an event that has occurred in the agent; column 13, lines 55 – 67 of Meandzija].

25. As to claim 15, Rangarajan as modified teaches providing, by the manager, a parameter [control status] with a parameter value that permits interruption [suspended] of a running state realignment [control status describes the control status of the unit represented by the agent/subagent with the possible values of subjectToTest, partLocked, reservedToTest, suspended, and free; column 13, lines 8 – 19 of Meandzija].

26. As to claim 16, Rangarajan as modified teaches sending, by the manager, the parameter to the agent in the request message [events processing module 224 is used to provide event information that is communicated to the agent to define pre-conditions for the agent to generate an event; column 10, lines 57 – 67 of Meandzija].

27. As to claim 24, Rangarajan as modified teaches utilizing state attributes selected from the group consisting of an unknown state [unknown status describes the unknown status of the unit represented by the agent/subagent; column 13, lines 27 – 34 of Meandzija], an alarm status [alarm status 430 describes the alarm status of the unit

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represented by the agent/subagent; column 12, lines 54 – 65 of Meandzija], and an available status [availability status 435 describes-the availability status of the unit represented by the agent/subagent; column 12, line 65 – column 13, line 9 of Meandzija] as state information.

28. As to claims 25 – 28, these are rejected for the same reasons as claim 19 and 14 – 16 above.

29. As to claims 18 – 23 and 29, these are system claims that correspond to method claims 2 – 5, 9, 10 and 24; note the rejection to claims 2 – 5, 9, 10 and 24 above, which also meets these system claims.

Response to Arguments

30. Applicant's arguments filed 4/11/2005 have been fully considered but they are not persuasive. In response to the Non-Final Office Action dated 1/11/2005, applicant argues/submits:

(1) Claims 1 and 17 have been amended to clarify that the state information which is checked by the agent is "state information of said agent", i.e., information describing the state of the agent [p. 7, 8-12] and it is now clear that the mid-level manager in the system taught by Rangarajan does not correspond to the "agent" in claims 1 and 17 [p. 7, lines 25-27].

(2) One of the benefits of the present invention is that less message traffic is required by having the agent with the information receive the request [p. 8, lines 1-10].

(3) The present invention is able to provide a further benefit in requiring less communication by relying upon a normal state that is previously known by both the agent and the manager. As a result, the manager does not have to supply the condition against which the state of the agent is compared. Instead, a simple request for a report of deviations from the normal state is sufficient to inform the manager of the state of the agent [p. 8, lines 11-21].

As to argument (1), examiner respectfully notes that the added limitation "state information of said agent" is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. This argument is moot in view of the 35 U.S.C. 112, first paragraph rejection.

In response to argument (2), examiner respectfully disagrees and notes that the specification discloses the realignment method can be limited to the updating of the state information between the agent and managers in two immediately adjoining management levels, e.g. level B and level A [p. 12, lines 5-10]. Examiner was unable to locate description of communication between a manager of level A and an agent of level C. For example, the specification discloses the state realignment begins initially between the base station subsystems, e.g. BSS11 (level C) and the applications OFi, OF2 in the

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operation and maintenance center OMC1 (level B) in parallel and then continues in parallel between the operation and maintenance center OMC1 and the higher-level network management centers NMC1, NMC2 (level A) [see p. 11, line 32 – p. 12, line 10 of the specification].

As to argument (3), examiner respectfully disagrees and notes that the claims do not preclude the request from including condition against which the state of the agent is compared. In addition, the specification discloses that the state realignment is parameterized so that only certain state information is transmitted on the basis of the parameter transmitted [emphasis added, p. 5, lines 23-26, p. 16, lines 24-27, p. 17, line 14 – p. 18, line 30]. Examples of parameter values include, begin time, end time, interval, administrative state, and related entities [p. 17, line 14 – p. 18, line 2] and these parameters are generally interpreted as conditions.

Conclusion

31. Applicant's amendment necessitated the 35 U.S.C. 112, first paragraph rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen
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